

Memorandum



Date: December 4, 2007

Agenda Item No.
12(B)5

To: Honorable Chairman Bruno A. Barreiro
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Report on the Installation of Guardrails Along Canals and Other Bodies of Water
Adjacent to County-Maintained Roadways

At the September 4, 2007, meeting of the Board of County Commissioners (BCC), Resolution No. R-1015-07 sponsored by Commissioner Sosa was approved. The resolution names the County's existing Guardrail Program in honor of Shayra Castro, and directs the County Manager to provide a report on guardrail installation. The information below is provided in response to this directive.

On April 10, 2001, Commissioner Dorrin D. Rolle sponsored Resolution No. R-380-01 directing the County Manager to conduct a feasibility study for the placement of barriers for safety purposes, and as a deterrent to illegal dumping in Miami-Dade County canals, lakes and other bodies of water. In response to this Resolution, the Public Works Department (PWD) initiated the Guardrail Program by establishing a record inventory of each location inspected through the use of sketches, photographs, description of existing conditions of guardrail, length, etc. Consequently, a list of proposed sites that met the requirements for guardrail installation was created. Subsequently, other Commissioners sponsored a number of resolutions requesting state and county agencies to place guardrails on roadways adjacent to bodies of water. These resolutions are listed as follows: Resolution No. R-647-04, sponsored by Commissioner Moss; Resolution No. R-1365-05, sponsored by Commissioners Souto, Rolle, Sosa, Diaz, Moss, Jordan and Gimenez; Resolution No. R-1453-06, sponsored by Commissioners Souto, Edmonson, Gimenez, Heyman, Martinez, Moss and co-sponsored by Commissioner Diaz; Resolution No. R-1007-07, sponsored by Commissioner Souto and co-sponsored by Commissioners Sosa and Rolle; and Resolution No. R-1015-07, sponsored by Commissioner Sosa and co-sponsored by Commissioner Martinez.

At the inception of the program, the only available funding for guardrails was an annual allotment of \$100,000 for the replacement of damaged guardrail sections. However, this allocation was not sufficient in order to implement a Guardrail Program that would meet the criteria outlined in all of the aforementioned resolutions. However, approval by the voters of the People's Transportation Plan (PTP) in November 2002 provided funding for a more complete program to address the required installation and repair of guardrails. Since that time, PWD has awarded contracts totaling \$1,906,000 funded through the PTP.

PWD's original inventory revealed that there are 1,006,500 linear feet (LF) of canals and/or bodies of water throughout Miami-Dade County. Of those, approximately 454,000 LF are not adjacent to roadways or are not under PWD's jurisdiction; which include those along State maintained roadways or within municipalities(*). As such, PWD has identified approximately 552,500 LF of canals and/or bodies of water adjacent to County-maintained roadways, out of which approximately 423,000 LF presently have some type of existing guardrails for protection and need to be further evaluated for needed repairs. This leaves approximately 129,500 LF of canals or bodies of water adjacent to roadways that

* To help prevent cars from crashing into canals on Florida's Turnpike, Florida's Turnpike Enterprise has implemented a \$20.5 million dollar project to add barriers or guardrails along the Florida Turnpike's 308 miles of highway. The project will build guardrails in some areas and cable barriers in others, depending on the distance of the water from the roadway.

are not protected. Of these, 105,270 LF meet the County's requirements for guardrail installation and have been placed on the program's list of proposed sites for the installation of guardrails. Please note that the PWD has adopted a policy which extends beyond the requirements of the State in an attempt to ensure that the majority of bodies of water are protected. FDOT requirements dictate guardrails be provided if the body of water is a maximum of 50' from the edge of pavement; however, PWD's policy increases this requirement to a maximum of 75'.

To date, PWD has designed, installed or is in the process of installing 40,465 LF of guardrails along canals and/or bodies of water adjacent to roadways, for a total cost of \$2,057,660. This total of new installation is a combination of PTP funds noted above (\$1,096,000) and a portion of PWD's annual Secondary Gas Tax allocation (\$151,600). PWD expects to install the remaining 64,805 LF, at an approximate cost of \$3,319,200. As previously mentioned, the primary source of funding available for the installation of guardrails has been through the PTP. The funds for new guardrails would need to be allocated from each Commissioner's Neighborhood Improvements PTP fund. An alternative funding source, approved by voters in November 2004, is the Building Better Communities General Obligation Bond (GOB) for the construction of Public Infrastructure and Neighborhood Improvements, specifically the GOB-UMSA funds allocated to each Commission District. As with PTP funds, each Commission District would be required to allocate resources for this purpose.

PWD has been working and will continue to coordinate with Commissioners and the Office of Capital Improvements (OCI) in prioritizing sites on the basis of most urgent public safety considerations. Locations without any degree of protection are currently being addressed, and those remaining locations where the guardrail protection needs to be brought up to current standards will follow. As noted above, an evaluation of the extent of needed repairs on these sites is currently underway. Once this evaluation is completed, an estimate will be developed and possible funding identified in order to address remaining bodies of water adjacent to County maintained roadways.



Assistant County Manager